DOCUMENT RESUME

ED 218 346 TM 820 387

AUTHOR Kennedy, Patricia H.
TITLE Applying Evaluation Standards to Prove Effectiveness of Major Training Program Revisions.
PUB DATE Mar 82
NOTE 39p.; Paper presented at the Annual Meeting of the American Educational Research Association (66th, New York, NY, March 19-23, 1982).

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Evaluation Criteria; Federal Programs; Higher Education; *Mainstreaming; *Preservice Teacher Education; *Program Evaluation; Special Education; *Standards; Teacher Qualifications
IDENTIFIERS *Deans Grant Project; *Standards for Evaluation Educ Prog Proj Materials

ABSTRACT

The Standards for Evaluations of Educational Programs, Projects, and Materials for developing an evaluation design were applied to Preservice Innovations in Mainstream Education (PRIME). PRIME, a Dean's Grant Project, is a 3-year federal and state program to modify preservice teacher preparation programs to enable regular education graduates to teach mainstreamed handicapped and nonhandicapped pupils together. The Dean's Grant Project development, its objectives, and budget are described and the project role of a university's Department of Special Education is discussed. The application of standards of utility, feasibility, propriety and accuracy in evaluating the Dean's Grant Project are discussed and found to be particularly useful in evaluation design, data collection, and reporting the information. (Author/CM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED218346

Applying Evaluation Standards to Prove Effectiveness of Major Training Program Revisions

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Patricia H. Kennedy, Ph.D.
Associate Professor
Department of Educational Technology
Arizona State University
Tempe, Arizona 85287

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

P. H. Kennedy

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TM820387

Paper presented at the 1982 annual meeting
of the
American Educational Research Association
in New York City

Standards for Evaluations of Educational Programs, Projects, and Materials, developed by the Joint Committee on Standards for Educational Evaluation (1981) who represented APA, AERA, and NCME, is a book containing guidelines and standards for evaluation in educational settings. The purpose of the present investigation was to apply these standards to a project with three-year federal and state funding located at a medium-large university setting. The goal of the project, the Dean's Grant Project, is modifying the preservice teacher preparation program for elementary and secondary students to include special education mainstreaming principles to enable regular education graduates to teach both handicapped and nonhandicapped pupils in regular public school classrooms. This paper will report on the usefulness of the Standards for developing an evaluation design. Also the standards which were either not applicable or not operational for this kind of a faculty development, curriculum revision project will be identified.

Basis for the Dean's Grant Project emanates from the need to prepare regular education teachers to accommodate handicapped students in the mainstream in accordance with PL 94-142. In 1974, deans across the nation were invited to submit proposals for changing teacher-preparation programs to the Bureau for Education for the Handicapped (BEH), U.S. Office of Education. Disenchanted with both inservice as a vehicle for staff development and "add-on" modules or courses at universities, BEH sought radical reconceptualization of teacher-preparation curricula. Problems inherent in this effort included attitude change among education faculties toward mainstreamed handicapped children, Public Law 94-142 and Sections 503 and 504 of the Vocational Rehabilitation Act of 1973. Also regular education faculties needed to expand the content of their courses to encompass

application to the handicapped. Since 1975, 205 universities and colleges have been funded. Currently, 115 are funded. By law, all teacher preparation institutions must attend to the mandate of Dean's Grant Projects.

To plan the evaluation, the four areas of Standards (utility, feasibility, propriety and accuracy) and their associated 28 subdivisions were cross-gridded with the following selected phases of evaluation: designing the evaluation, collecting the information, analyzing the information, and reporting the evaluation. The subdivisions that applied to the evaluation were operationalized in terms of guidelines, timelines, experimental design, and/or measurement procedures (See Table 1). It was found that the Standards were particularly useful for designing the evaluation, collecting the information and reporting the evaluation. Procedures for analyzing the information yielded by an evaluation come under the rubric of statistics and measurement books.

The first part of this paper describes the project, the objectives, and the budget. The role played by the department of Special Education is then explained, followed by an application of the standards to the design of the project. The standards are discussed in the order in which they appear in the table of contents of Standards for Evaluations of Educational Programs, Projects, and Materials (1981). This does not correspond to the order in which the standards would be considered in an on-going evaluation.

Table 1.
Standards to consider for selected phases of evaluation

	Designing the Evaluation	Collecting the Information	Analyzing the Information	Reporting the Evaluation
A. Utility				
1. Audience identification	X			X
2. Evaluator credibility		X		
3. Info. scope & selection	X	X		X
4. Valuation interpretation	X	X	X	X
5. Report clarity				X
6. Report dissemination				X
7. Report timeliness				X
8. Evaluation impact				X
B. Feasibility				
1. Practical procedures	X	X	X	
2. Political viability		X		
C. Propriety				
1. Formal obligation	X	X		
2. Conflict of interest	X			
3. Full & frank disclosure				X
4. Public's right to know				X
5. Rights of human subjects		X		
6. Human interactions		X		
7. Balanced reporting	X	X		X
D. Accuracy				
1. Object identification	X	X	X	X
2. Content analysis		X	X	X
3. Described purposes & procedures	X	X		X
4. Defensible info. sources	X	X		X
5. Valid msmt.	X	X		
6. Reliable msmt.	X	X		
7. Systematic data control		X		
8. Analysis of quant. data	X			
9. Analysis of quali. data	X			
10. Justified conclusions	X			X
11. Objective reporting	X			X

Project Overview

The Dean's Grant Project, (Preservice Innovations in Mainstream Education PRIME involves both faculty and program development activities necessary for implementation of an innovative, integrated preservice teacher education program at a medium-large university. The major program goal is the graduation of students who have attained competencies in mainstream education through participation in the project's model program. The basic format for their training will be Learning Clusters. Learning Clusters are comprised of teams of 20-30 students and four faculty from regular and special education and related support services. Program graduates are expected to be a cadre of change agents who have acquired skills in collaborative planning, problem-solving, and decision-making for meeting the needs of mainstreamed handicapped students who may come from a bilingual, multicultural backgrounds. Institutionalization of infused mainstreaming competencies into the reorganized teacher preparation program will ensure the permanence of the project's results.

The PRIME Project is intended to include three phases: faculty and program development (year 1); program implementation and preservice training activities (years 2 and 3); and program follow-up and continued resource support to trainees in-service (year 4 and beyond, subsidized totally by state funds). The project also includes systematic documentation, evaluation, and dissemination of program processes and products in order to promote both project institutionalization and the export of program elements which contribute to the attainment of major program goals.

While most teacher-educators are participating in faculty development activities and all are receiving mainstreaming information for infusion, intensive training is provided only to teams of faculty selected for the

Learning Clusters. This includes team-building, group process, field placement, field training, and collaborative research and development with special educators. During the first year, student members of the Learning Cluster are recruited and the Learning Cluster program is planned and reviewed.

During the second project year, the model teacher preparation program based on a cross-disciplinary integrated model with infused mainstream education principles, will be implemented with College of Education juniors and faculty who have worked intensively with Dean's Grant staff. Also, faculty development activities continue, as in Year One, with all other College of Education faculty in order to infuse appropriate knowledge, skills and attitudes into the regular education curriculum. Extensive field-based experiences in mainstream classrooms continues for students and faculty alike.

Objectives

Implicit in the attainment of the major project outcome are these seven objectives: (1) development of comprehensive system of resource support, (2) implementation of faculty development activities designed to enhance knowledge of the intent and application of PL 94-142 and to facilitate active participation by faculty in mainstream activities; (3) identification and building of teams of faculty and students who will participate in Learning Cluster Teams; (4) development and implementation of the teacher preparation program based on the Learning Cluster concept; (5) documentation of the change process; (6) assessment and evaluation of the impact of the change process; and (7) dissemination of project information and products.

Budget

The project is projected to receive $75,000 from the Office of Special Education annually for three years. State funds approximately matched federal funds in the first year and in subsequent years doubled and tripled them.

Staff who remained with the project throughout the three years and their time involvement were the Dean (20%), project coordinator (100%), assistant coordinator (33%), secretary (50%), and graduate assistant (50%). One associate professor from elementary, secondary and special education worked half-time. Other faculty members were associated with the project for varying periods of time for the purposes of teaching and research.

Role of the Special Education Department

The role of the Special Education Department in the Dean's Grant is that of resource provider. The department provides technical assistance to elementary and secondary faculty who infuse mainstream education principles into the regular education teacher preparation program, faculty for the learning cluster, and associate professor who works half-time on the Dean's Grant Project, and a member (the Department Chair) of the Dean's Grant Advisory Committee. In addition, faculty from all three departments collaborate on research.

Description of the Department of Special Education

The Department of Special Education is a large, comprehensive organizational unit. Degree programs are offered at the Undergraduate, Masters (M.A.; M.Ed.), and Doctoral (Ph.D.) levels. Teacher certification programs are offered at the Undergraduate, post-baccalaureate, non-degree, and Master's degree levels. Graduates of the Undergraduate program are eligible for Arizona Basic certification as a teacher of the mentally handicapped (MH), emotionally handicapped (EH), or learning disabled (LD). These same certification areas carry over to the post-baccalaureate non-degree and Master's level programs.

The focus of the Undergraduate teacher preparation program is on the preparation of teachers for resource room or self-contained classrooms for mildly handicapped students. While certification is for grades K-12, the majority of students are prepared for elementary level assignments. The Undergraduate program is comprised of requirements in four areas: (a) general studies, (b) special education, (c) supplementary (professional education) requirements, and (d) related area of study (minor). The Special Education requirements include a cross-categorical core of

introductory, evaluation, and methods courses, and student teaching courses. The supplementary requirements are comprised, primarily, of elementary education requirements necessary for Arizona certification as a teacher of exceptional children.[3] The related area of study is comprised of an 18-hour sequence of courses selected from a specific Department from which the student wants to obtain an academic minor. Approximately half of the special education undergraduates select elementary education as their minor. This selection allows them to qualify for dual certification in special and elementary education.

The Post-baccalaureate certification program has the same focus as the undergraduate program. This program is comprised of a 30-hour program comparable to the special education requirements of the Undergraduate program. Emphasis of the Master's program is on the preparation of Master Teachers with the skills needed to teach either (a) mildly handicapped students, (b) multicultural/bilingual exceptional students, (c) gifted students, or (d) severely/multiply handicapped students.

The student population served by the Undergraduate program is typical of a large urban university. The average student is in his or her early 20's and works at least part-time in addition to attending school. Approximately 300 students are enrolled in the Undergraduate program during any given semester. Students enrolled in the Master's program are essentially full-time teachers who are pursuing standard certification and/or an advanced degree.

The Special Education faculty is comprised of 18 "tenure-track" and three "visiting" professors. Professional assignments are divided between the undergraduate and graduate level programs and between program emphasis area (e.g., gifted, severely/multiply handicapped) and certification areas

(e.g., MH, EH, LD). Years of faculty service to the Department range from one to 28 with an average of eight years and median (and mode) of five years. Thirty percent of the faculty have been with the Department 11 years or more; 55 percent have been with the Department five years or less.

Relationship of Special Education to Elementary and Secondary Education

The relationship between the Departments of Special, Elementary and Secondary Education is typical of most colleges where the three departments co-exist. The relationship between Elementary and Special Education is closer, programmatically, than is the relationship between Special and Secondary Education. This is due to the fact that about 50 percent of the students in both departments pursue dual majors and because the majority of the Special Education graduates acquire elementary level special education teaching positions.

The relationship between Special Education and Elementary and Secondary Education could be best described as "collaborative competition". Departmental faculty maintain cordial personal and working relationships. In addition, faculty work productively between Departments on College projects of mutual interest to each Department.

Competition between Departments occurs in relation to resource acquisition, student recruitment, and program orientation. While all three Departments are committed to the preparation of high quality teachers, the Departments differ in their view of what are the best approaches to doing so and what content their programs should emphasize. The differences in program outlook are sharpest for Elementary and Special Education, with Special Education emphasizing an objectives based, behavioral orientation to teacher preparation. Competition is also supported by shared misperceptions of the skills of faculty in Departments outside one's own.

Potential Bonuses/Concerns

Participation in the Dean's Grant Project has the potential for creating both bonuses and concerns for the Special Education Department. Potential bonuses include:

1. increased efficiency, in a period of declining resources, in the preparation of undergraduate teacher education majors;

2. the opportunity to work cooperatively and share skills with faculty from outside departments;

3. the opportunity to assist in significantly strengthening the quality of undergraduate teacher preparation;

4. the assurance that handicapped students will have teachers who have the skills necessary for effectively teaching handicapped pupils.

Potential concerns that are being created through the Dean's Grant include:

1. concerns regarding faculty roles and responsibilities should the Dean's Grant result in the reorganization of the Undergraduate teacher preparation program. The concern centers on both the loss of program visibility and autonomy;

2. concern that infusion of Special Education content into the elementary/secondary curriculum will (a) create the illusion of competence in program graduates, (b) not provide sufficient preparation for the students enrolled, (c) result in decreased accountability (as opposed to a separate course) regarding whether or not content was taught, and (d) result in decreased enrollments in Special Education course offerings;

3. concern that a reorganization of the undergraduate teacher preparation program will result in a "watering down" of the current Special Education undergraduate program.

Special Education faculty working with the Dean's Grant Project strive to accomplish project goals without the concerns expressed above becoming a reality.

Application of the Standards

A. UTILITY

A1. Audience Identification

The first task after deciding to conduct an evaluation will be to identify all individuals and groups who will use the evaluation results to make decisions. These include people at federal, state university, college and department levels. Individuals who are identified will be contacted to determine what type of information will be useful to them and how the information will be used.

For example, at the federal level, the funding agency will be apprised of program effectiveness, and may use this information to fund future programs. Results of Dean's Grant evaluations may also contribute to federal policy-making regarding mainstream education. In the College of Education where the Dean's Grant operates, project evaluation data will most likely be used to make curricular changes by incorporating mainstream education content into required programs of study.

After audiences and their particular needs are identified, they will be rank ordered. Subsequent evaluation activities like data collection and reporting will be tailored to the needs of those who will use the information.

If necessary, more than one version of evaluation results will be written so that they are in a form most useful to each audience. When possible, however, the same evaluation report will be submitted to multiple audiences.

A2. Evaluator Credibility

The Project Coordinator, who will direct the evaluation effort has extensive experience in conducting evaluations in a variety of

settings and of varying complexity. She has authored numerous publications in professional journals, mostly in the area of data collection, measurement, and statistical analysis. She is a faculty member in the College of Education and has an excellent working relationship with the Dean's Grant staff. The issue of the objectivity of the valuation report is addressed in section D11.

A3. Information Scope and Selection

The needs of all identified audiences will be considered in designing the evaluation so that all relevant questions can be answered. Whenever possible, important members of the audiences will be contacted for input. Evaluation concerns will be prioritized and incorporated into the design in order to ensure the most important concerns of all audiences are addressed.

Much of the evaluation data collected by the Dean's Grant will be used in a formative sense for ongoing program planning and revision. The project staff may have specific questions they need to address -- questions that will not be useful to other audiences who are interested only on summative results.

The Dean's Grant evaluation will be conducted by the Project Coordinator rather than by an outside evaluator. This potentially could cause the problem of "overlooking the obvious" when determining evaluation concerns. Therefore, it is very important to have sufficient and ongoing contact with evaluation audiences to ensure covering the entire scope of concerns.

A4. Valuation Interpretation

The important question related to this standard is: "What will be an indication that the Dean's Grant succeeded in achieving its

goals?" Obviously, success is achieved if the seven major objectives of the project are met. Regardless of how much data is collected and how many reports are written, however, judgments will still have to be made about the worth of the project efforts and accomplishments. The results of project evaluations will be interpreted by several different audiences, who most likely will make independent judgments. Adequate contact with the audiences must be made prior to the design of the evaluation so that project staff are aware of what are perceived to be indications of worthwhile outcomes. The evaluation must then be designed to provide information that answers important questions and enables each audience to make accurate professional judgments of the value of project outcomes.

A5. Report Clarity

The evaluator will be in contact with all audiences throughout the duration of the Dean's Grant Project. A bimonthly newsletter will be published to keep interested parties apprised of project activities and accomplishments on a regular basis. In addition, key members of the audiences will receive copies of continuation proposals and interim reports that must be submitted to the funding agency.

All reports will be organized around the seven major project objectives, and will address the evaluation questions related to each objective. Reports will be written in clear, concise, non-technical language, and will be tailored to the needs of the various audiences. Simple tables, charts, and graphs will be used liberally in the reports to summarize information and clarify results. For example, an evaluation report prepared for participating school

districts might be organized in a different manner than a report for the Dean of the College of Education. School districts would be most interested in information about the specific skills that graduates of the model program possess, whereas the Dean would be most interested in curricular changes that are necessary to prepare teachers for mainstreaming. Reports for these two audiences would be written to focus on the topics of most interest to the reader. Executive summaries will be written to accompany each report.

A6. Report Dissemination

Key members of audiences who are most closely involved with the project will review drafts of reports before they are completed. Revisions will be made for clarity and accuracy based on reviewer comments.

All audiences who have been identified as appropriate recipients of the evaluation report will receive a copy of the final report. Summaries will be available for interested people who do not want to read the entire report. As explained in Section A1., the audiences include individuals at federal, state, and university levels. Abbreviated versions of the final report will be reported in news media such as the College of Education Newsletter and local newspapers.

A7. Report Timeliness

At the time that audiences are identified they will be asked when they will need a final evaluation report for purposes of decision-making. A timetable will be established based on what is realistic for the project staff to accomplish and the needs of the audiences. For example, a report cannot be prepared before the end of the school year during which data is being collected. Every attempt must be made, however, to provide evaluation results in

time to be useful to affected audiences. The funding agency may need evaluation results in time to make decisions for a new funding year. The College of Education may need results in time to institute curriculum changes for the next school year.

The timetable should be flexible enough to accommodate unexpected delays and changes. If delays do occur, an attempt will be made to provide audiences with any crucial information they may need prior to the preparation of the final evaluation report.

A8. Evaluation Impact

A significant amount of audience contact with and input to the project has been described in this section. If audiences participate in the planning and implementation of evaluation efforts, there will be several benefits: they will receive information from the results which are useful to them; they will view the results as credible and important; they will use the results to make decisions about policies related to mainstream education.

The evaluation report should contain recommendations for actions that might be taken by various audiences based on the findings. For example, it might be suggested that the teacher training program be changed to include field experiences for preservice teachers in classrooms with mainstreamed students. A follow-up period will be planned into the timetable so that audiences can be contacted after receiving the evaluation report and given assistance in implementing recommended actions.

B. FEASIBILITY

B1. Practical Procedures

Since the Dean's Grant Project operates on a relatively small

budget and with a small staff, it is extremely important that the evaluation will be simply designed and easy to implement. The Project Coordinator has several responsibilities in addition to project evaluation, and has one part-time assistant to help implement the plan.

In order to keep money and personnel requirements to a minimum, it will be necessary to use existing instruments to measure attitudes and achievement whenever possible. Evaluation tools may be borrowed from other Dean's Grant Projects across the country, if they are appropriate for this evaluation. Instruments developed in-house will be tried out with a small sample of individuals in the College of Education. Sampling will be relatively easy to carry out since the population consists of approximately 150 faculty members and one class of College of Education students.

B2. Political Viability

Although conducting and reporting an evaluation for several audiences may be politically volatile, this is not a major concern in the evaluation of the Dean's Grant Project. While there may be differences in the type of information various audiences need from the evaluation results, it is believed that all audiences are committed to the project goal: to operationalize a teacher education program that better prepares teachers for the challenges of mainstreaming.

Section A of this report describes how the Dean's Grant plans to involve audiences in the evaluation so all needs will be accounted for. The project objectives and procedures will be explicitly stated, and audiences apprised of activities on a regular basis. Audience

feedback will be used to modify plans and procedures. These measures should ensure that a politically viable product results from the evaluation.

C. PROPRIETY

C1. Formal Obligation

The Dean's Grant Project evaluation will be done to fulfill the requirements of the funding agency, The Bureau of Education for the Handicapped. The original evaluation plan was outlined in the original proposal for funding and elaborated in the continuation proposal. Since this is an internal evaluation, conducted under the direction of the project coordinator, there is no evaluator/client relationship. The project does have a formal obligation to the funding agency, however, to fulfill the evaluation plan included in the proposal. The agency must be informed of and approve any changes or revisions to that plan.

Briefly summarized, the purpose of the evaluation is to determine whether the project objectives have been achieved. The seven objectives are stated below:

1.0 To develop a comprehensive system of resource support for PRIME Project participants and others within and outside the University who are involved in the implementation of teacher education programs.

2.0 To implement faculty development activities designed to enhance knowledge of the intent and application of PL 94-142 and to facilitate active participation by faculty in mainstream activities in the College and the local schools.

3.0 To identify and build teams of faculty and students who will participate together in Learning Cluster Teams to develop and tryout

the proposed model of preservice teacher preparation in mainstream education.

4.0 To develop and implement a program of teacher preparation based on the institutionalization of mainstream education.

5.0 To document those aspects of the change process that might assist other institutions conduct similar projects.

6.0 To assess and evaluate the impact of the Project.

7.0 To disseminate project information and products.

Evaluation questions have been formulated for each objective along with data sources and methods of collecting data. Most of the evaluation effort will be focused on assessing the effectiveness of the project's faculty development program, the infusion of mainstreaming content into the entire College of Education curriculum, and the two-year model teacher education program. This will involve assessing faculty and students prior to the implementation of project activities, periodically during the 3-year project, and at the end. Changes in attitudes, knowledge level, and skill level will indicate the degree to which objectives have been met.

C2. Conflict of Interest

Conflict of interest, while generally avoided, may also provide a healthy safeguard for adversary participants. For example in our project, there is a long-standing, competitive relationship between the participating departments. To protect their vested interests while nonetheless negotiating a new cooperative relationship, each department sent a faculty member who was a tenured associate professor. They were eager for promotion yet not worried about dismissal. They worked for the grant's progress yet maintained the interest of their department.

Their fellow department members trusted the compromises that were made.

Through the manipulation of a natural conflict of interest, the project's goals were in fact furthered.

C3. Full and Frank Disclosure

Given that our evaluation results will be reviewed by three competing departments, the acknowledgement of shortcomings in design or carry-through is, in fact, a self-serving protective mechanism.

C4. Public's Right to Know

The public's right to know the pros and cons of mainstream education will be served by the project's newsletter which is sent to school districts and interested individuals, the College of Education newsletter which is mailed to 40,000 individuals and oral communications from project staff.

C5. Rights of Human Subjects

Participating students and faculty will be apprised of all project goals and possible problems. All testing on any student (interests, motivation and so forth) will be shared with that student and not shared with anyone else except as group data where individual scores are anonymous.

C6. Human Interactions

Persons participating in the project will do so by their own volition. All project goals and evaluation strategies will be discussed openly. Decisions will be reached by consensus whenever possible. Special efforts will be made to include members of special interest groups such as bilingual-multicultural.

C7. Balanced Reporting

When conducting an internal evaluation such as the present one, there is often the danger that strengths will be over-emphasized and weaknesses ignored or downplayed when reporting results. This presents a problem for both the formative and summative stages of the evaluation. If weaknesses are overlooked in formative data, appropriate program changes and modifications may not occur. By downplaying project weakness in the summative evaluation, the effectiveness of the entire program may be misrepresented, thus giving decision-makers inaccurate information.

Every effort must be made to examine both the strengths and weaknesses revealed by the evaluation data. Outside reviewers will be asked to critique the evaluation reports. These reviewers will represent individuals from the College of Education, the local public schools, and state and federal levels of government. Reports will be revised based on pertinent reviewer comments.

In addition, any evaluation data that are missing or insufficient for answering important questions will be reported as constraints of the report. This will enable audiences to make more valid judgments of results.

D. ACCURACY

D1. Object Identification

This standard is not particularly relevant to the internal evaluation of the Dean's Grant Project. Since the evaluator is also the Project Coordinator who is closely involved with all aspects of the project, identifying the object of the evaluation is a straightforward task. If there are any uncertainties on the part of the Project Coordinator, she can verify her perceptions with the project

Table 2
Evaluation Questions, Data Source and Collection Method by Objective

Objectives	Evaluation Questions	Data Source	Method of Collecting
1.0 Resource support 1.1. Establish advisory structures *-Dean's Council *-Interdisciplinary teacher Education Advisory Committee *-PRIME Advisory Board	Have the groups been established? Are the groups performing their advisory functions? Do groups contribute to Project planning decisions? Do groups review Project programs & products? Do groups contribute to resource pool?	3 advisory groups	Survey members Analysis of minutes and other records.
1.2. Info-services *-materials center -responses to info requests	Has a materials center been established? Is it used? By whom? How often? What is quality & extent of resource collection?	IRL collection	Review IRL records
	Are requests for information processed quickly and efficiently?	Project files	Review files on infor. requests.
1.3. Consultants and resource persons.	Does Project make effective use of local and outside consultants for conferences, training workshops, planning input, program development, etc?	Meeting agendas.* Training agendas. Project documentation records	Review Agendas.
1.4. Develop learning resources *-select -adapt -develop	Have appropriate materials been selected, adapted, and developed to assist faculty in mainstreaming implementation in their courses? Are the materials effective? To what extent are the materials used? By whom? How often?	Project files Faculty members.	Review materials. Survey faculty

*Completed or in progress.

Objective	Evaluation Questions	Data Source	Method of Collecting
2.0 C.O.E. Faculty *-awareness -knowledge -application/ implementaion -attitudes	Is there a change in each of these areas from beginning to end of Project?	C.O.E. faculty	Pretest - Fall '80* Posttest - Spring '83
2.1. Disseminate info -advocate *-use established channels *-newsletter & p.r.	Was info. disseminated to faculty? Were appropriate channels used to reach greatest number of faculty? Did staff act as project advocates? Was a newsletter published?	Project files C.O.E. faculty	Review documentation files. Analyze dissemination efforts. Survey faculty.
2.2. Implement faculty development activities -conferences -colloquia -discussion groups -learning resource teams -collaborative research teams	Were development activities implemented? Were they effective in providing faculty with new skills and ideas? Were the objectives of each activity attained? Were resource teams established? What was the extent of participation in development activities? Are faculty from different departments conducting mainstreaming research?	Project files. C.O.E. faculty. C.O.E. students.	Review agendas of each activity.* Brief evaluation form for each activity.* Review mainstream content on course syllabi. Student course evaluations. Publication of research on mainstreaming. Student performance on mainstreaming competenices test. Fall '80 Spring '82 Spring '83
2.3. Clinical & field experiences -on-site -contact w/handicapped on campus	Were faculty provided with clinical & field opportunities? What was the extent of faculty participation? How effect were field expereinces?	C.O.E. faculty	Faculty survey & interviews. Teacher surveys.

*Completed or in progress

Objective	Evaluation Questions	Data Source	Method of Collecting
3.0 Establish Learning Cluster Teams (faculty & students) 3.1. Faculty teams *-select members *-team building and organizational development training -field-based practica -Learning Resource Teams -Collaborative research awards	Were faculty members selected for Learning Cluster Teams? Was training provided in team building & organizational development? Were training objectives achieved? Did Learning Cluster faculty have field-based experiences? Were incentives provided for conducting collaborative research? What was degree of faculty participation? Did team select plan for model program?	Project files. C.O.E. faculty	Faculty survey & interviews. Brief evaluation form for training activities. Expert review of model program.
3.2. Student teams -provide info. -orient to PRIME -counsel & advise -select students for model program	Did Project succeed in reaching large number of potential student team members? Were students adequately informed about Project goals & model program? Were 60 students selected for model program by May '81? What are entering competenices in mainstreaming of students selected for model program? What is academic & Personal profile of 60 students?	C.O.E. students	Student interviews Checklist for academic and personal profile Pretest mainstreaming competencies of Learning Cluster students, Fall '81.

Objectives	Evaluation Questions	Data Source	Method of Collecting
4.0 Implement Learning Cluster (model program		Project files.	Program review by local & outside experts.
4.1. Program development	Was 2-year model program developed incorporating the 10 areas of mainstream capabilities? What are specific program objectives? Is program attractive to students?	Faculty members of Learning Cluster Experts in field. Students.	Program review by students.
4.2. Program implementation	Was 2-year model program implemented? Were program objectives achieved? How do students in Learning Cluster compare to: 1) C.O.E. students prior to Dean's Grant 2) C.O.E. students who received some integration of mainstreaming content in core courses	Regular C.O.E. & Learning Cluster students. Teachers in field who worked with Learning Cluster students. C.O.E. faculty	Performance & attitudes of 3 groups of C.O.E. students in mainstreaming. Student interviews. Teacher interviews and/or survey. Faculty interviews and/or survey. Follow-up study of success of model program students.

Table 3

Evaluation Plan

Project Activity	Evaluation Criteria/Method
Comprehensive Resource Support	1. Active participation by advisory groups 2. Utilization of resources 3. Satisfaction with resources 4. Evidence in products of resource 5. Utilization 6. Development of effective/usable resources
1.1.1 Meet with Dean's Council	Survey of members Analysis of minutes and other records
1.1.2 Report to Teacher Education Advisory Committee	Survey of members Analysis of minutes and other records
1.1.3 Convene Advisory Board	Survey of members Analysis of minutes and other records
1.2.1 Establish Mainstreaming Materials Center	User satisfaction survey
1.2.2 Respond to Information Requests	User satisfaction survey
1.3.1 Maintain Resource Bank	User satisfaction survye; consultant reviews
1.4.1 Select Mainstream Materials	User records
1.4.2 Adapt Materials	Consultant review; field test
1.4.3 Develop Materials	Consultant review; field test
1.4.4 Develop Assessment Materials	Consultant review; validation
Faculty Development	1. Formation of faculty teams 2. Self-evaluation survey 3. Stages of concerns questionnaire 4. Evidence of mainstream content in syllabi 5. Student performance of mainstream competencies 6. Course evaluations
2.1.1 Advocate PRIME Goals	Participation in prime activities
2.1.2 Use Communication Channels	Participation in prime activities
2.1.3 Produce Newsletter	Participation in prime activities
2.2.1 Multidisciplinary Conference	Participant questionnaire
2.2.2 Colloquim Series	Participant questionnaire; interviews
2.2.3 Discussion Groups	Participant questionnaire; interviews
2.2.4 Learning Resource Teams	Consultant review of materials
2.2.5 Collaborative Research	Consultant review; Publication of scholarly research
2.3 Provide Clinical Experience	Faculty, teacher questionnaires

Project Activity	Evaluation Criteria/Method
Team Building	1. Interviews 2. Consultant/Facilitators' Reviews 3. Successful implementation of learning cluster program (Years 2, 3)
3.1.1 Identify and Select Team	Interviews with team members
3.1.2 Provide Team Training	Interviews with team members
3.1.3 Place team in practice	Interviews with team members; classroom teachers
3.1.4 Form Learning Resource Teams	Consultant review of products; field tests
3.1.5 Award Research Grants	Publication of research reports
3.2.1 Provide Information	Survey of students
3.2.2 Orient Students to Goals	Survey of students
3.2.3 Provide Counselling	Interest measured by recruitment success
3.2.4 Select Students	Interest measure by recruitment success
Learning Clusters	1. Performance of graduates 2. Institutionalization 3. Export and adoption
4.1 Develop Learning Cluster	Consultant review; Advisory Board review

staff and other individuals in the College of Education who are involved with the project. It may be useful at times to hire outside observers to validate the perceptions of the staff regarding the object of the evaluation.

D2. Context Analysis

The nature of the context in which the Dean's Grant operates will be monitored closely throughout the duration of the Project. This is especially important because of the fact that three separate departments are involved which sometimes are in a competitive mode for resources. The context is also continually changing at the federal level as administrative changes affect funding and the security of many sponsored projects. In addition, PL 94-142, the law on which the Dean's Grant is based, is a controversial one and has caused much disagreement among educators at all levels. In order to keep abreast of the current state of the context of the Project, a file will be kept containing information which is pertinent in any way to Project operations. Also, staff will be aware of changes in any political, social or economic conditions that may have implications for Mainstream Education.

D3. Described Purposes & Procedures

The most recent version of the purposes and procedures of the evaluation is included in the Dean's Grant Continuation Proposal, October 1980. The existing evaluation plan is summarized in Table 2. This plan was designed by the Project Coordinator and approved by the funding agency. Records of how the plan "works" will be kept in the Project's documentation file. The plan will be modified as project objectives change, or as parts of the plan are found to be unworkable. Changes to the evaluation plan will be reported in

Interim Reports and in the final evaluation reports.

D4. Defensible Information Sources

A variety of information sources will be used during the evaluation, as can be seen in Table 2. Two different groups of students will be involved in the data collection effort. One group consists of students who are training to be teachers but who are not in the model teacher education program. The other consists of the students who go through the two-year program. The first group will be selected for data gathering by a random selection process. Since the second group is small (approximately 40), the entire group will be used.

The same system will be employed for collection of faculty data: a random sample of College faculty who are not directly involved with the model teacher education program will be selected, while all faculty teaching courses in the model program will be sources.

Project files will contain an objective-by-objective record of all project activities. This record will provide process information and can be used to determine whether the project is on-task and whether staff efforts are related to accomplishing objectives. Data will be collected through a variety of methods including written surveys, checklists, assessment of competencies, review of files and records, and interviews.

D5. Valid Measurement

After the project's objectives are stated, they will be operationalized in terms permitting objective measurement and empirical determination of current status or by changes in behaviors associated with these objectives. Whenever possible,

multiple criterion measures in both the achievement and attitude domains will be used to hedge against false gains or false losses thus improving the likelihood of validity.

During the first and second Project years, most evaluation tasks will be formative in nature and generally process-oriented. Table 3 indicates how Project documentation and products will be used as the basis for this process evaluation. Major criteria for measuring the success of the first four program objectives are also listed. This will facilitate comparison of standards for success to actual program performance. Achievements, progress toward major project goals and objectives, and discrepancies between actual and anticipated performance will all be reported in the final report to be submitted approximately one year after project start-up. Continuous review by advisory boards, consultants, and project staff will, however, permit changes and adaptations in the Project where necessary to promote attainment of the objectives.

Continuous evaluation of the program by staff, consultants, and advisory board members will be assured by the Dean/Project Coordinator. This collaborative internal-external review process is an essential part of the cooperative model on which the Project is based. In addition, the Coordinator will continue to be responsible for developing instruments and ensuring that suitable data are collected for assessing attainment of the objectives. The Coordinator will also collate data and prepare evaluation reports for the various project constituencies.

D6. Reliable Measurement

While reliability will be a pertinent consideration in the

selection of developed instruments, reliability of project-developed instruments is also an issue to be wrestled with. One way to determine reliability is to obtain independent confirmation of activities from participants. An example of this is the record-keeping system. Upon completion of any key activity, project staff members complete an "Activity Report Form". The form is filed sequentially by objective by a supervised graduate assistant. Reliability is attained by mutual independent consensus among the staff involved. Also, this system will allow easy access to process information related to each project sub-objective. Review of documentation files will reveal areas in which procedures need to be revised to be more efficient or effective.

D7. Systematic Data Control

Both data and the conclusions drawn from the data will be subject to systematic quality control. Key punched data will be verified. Hand calculated projections of results based on samples will be compared to results obtained from the computer analysis of all subjects to identify potential errors. Interpretations of results will be scrutinized by Learning Cluster faculty, each of whom come from a different department and so have their own separate interests and constituents apart from a common interest in the Project.

D8. Analysis of Quantitative Information

The evaluation design for the project is presented by objective in Table 2. Data will be collected on an on-going basis by the collection methods indicated. These methods include surveys of faculty and students, review of Project files, review of workshop and meeting agendas, pre-and post-assessment of student mainstreaming

Table 4
Schedule of Competency and Needs Assessment
Administration To Three Groups of Undergraduates

Group 1:	Amount of mainstream content in program	When administered needs assessment and mainstream educational competencies
December '80 random sample of graduates in Elementary, Secondary and Special Education.	Existing College of Education program: little or no mainstream content.	Posttest needs assessment: September 1980 Posttest competencies: December 1980
Group 2:		
Spring '83 random sample of graduates in Elementary, Secondary, & Special Education existing program	Amount infused through general faculty awareness activities such as workshops, colloquia, etc.	Pretest needs assessment: September 1981 Posttest competencies and needs assessment: May 1983
Group 3:		
Spring '83 Learning Cluster graduates 20 Elementary 20 Secondary 20 Special	Project Program built around mainstream content including mainstream practica	Pretest needs assessment: September 1981 Posttest competencies and needs assessment: May 1983

competencies, and interviews with faculty, students, and teachers who have been affected by the project.

D9. Analysis of Qualitative Information

Three groups of undergraduate students will be administered a questionnaire on their perceived needs in the ten areas of mainstream education capability. A proficiency test of mainstream education competencies will also be administered. See Table 4 for an outline of when each of three control groups will be administered the two instruments.

The needs assessment and competency test data from Group 1 graduating seniors in 1980-81, will serve as baseline data on the program that now exists in the College before Project input. Comparisons of this group with both of the other two groups will indicate effects from the Project. That is, Group 1 baseline contrasted with Group 2, seniors graduating in May 1983 who were not Learning Cluster students, will demonstrate how much mainstream education content has been infused into College of Education courses that the Project did not work with directly. Group 2 graduates and their instructors will not work with Project staff directly, but their courses will contain some mainstream education content, Group 2 will not have the benefit of our systematically sequenced model program which will include a K-12 scope-and-sequence interdisciplinary overview and a practicum experience with handicapped students in regular education classrooms. Comparing Group 1 with Group 3, the 60 Learning Cluster students tested just before they graduate in May 1983, will illustrate the change that occurs from the existing program after three years of association with the

Dean's Grant. The Learning Cluster program will be sequenced and designed around mainstream capabilities. It will include a block of collaborative K-12 basic education overview and student teaching in mainstreamed classrooms. Differences between Group 2 and Group 3 will provide data for a cost-effective question: how much of a difference in student performance occurs when the Dean's Grant personnel work individually and intensively with all faculty members on comprehensive program (Group 3) versus Project personnel working at the infusion level in group workshops (evidenced by Group 2 proficiency).

D10. Justified Conclusions

Writing conclusions in a final evaluation report is an extremely complex task. A great deal of information must be synthesized into a few clear, concise, and accurate statements about the effectiveness and worth of the project. A complete description of procedures and findings will be included, along with constraints and extenuating circumstances. It would be most useful to have experts in mainstream education review the evaluation results and critique the conclusions of the final report. Alternative conclusions will be written, and the audiences encouraged to use their own professional judgment in interpreting the conclusions.

D11. Objective Reporting

This standard is of special importance to the Dean's Grant evaluation, since it will be conducted internally and reported by the Project Coordinator. Outside review of procedures, instruments, and reports is the most realistic way to ensure objective reporting, since resources are not available to engage